THE AUTOMOTIVE EDGE™

The Official Publication of the
NATIONAL LOCKSMITH
AUTOMOBILE ASSOCIATION™

05.03

2001 Toyota Prius

by Michael Hyde

1. *Toyota's first entrance into the new hybrid vehicle market comes in the form of the 2001 Toyota Prius, 4-door sedan. Average gas mileage has been reported to be between 40-55 miles per gallon, depending on driving conditions.*

Issue
No.44

Here are the two best websites for Automotive Locksmiths:

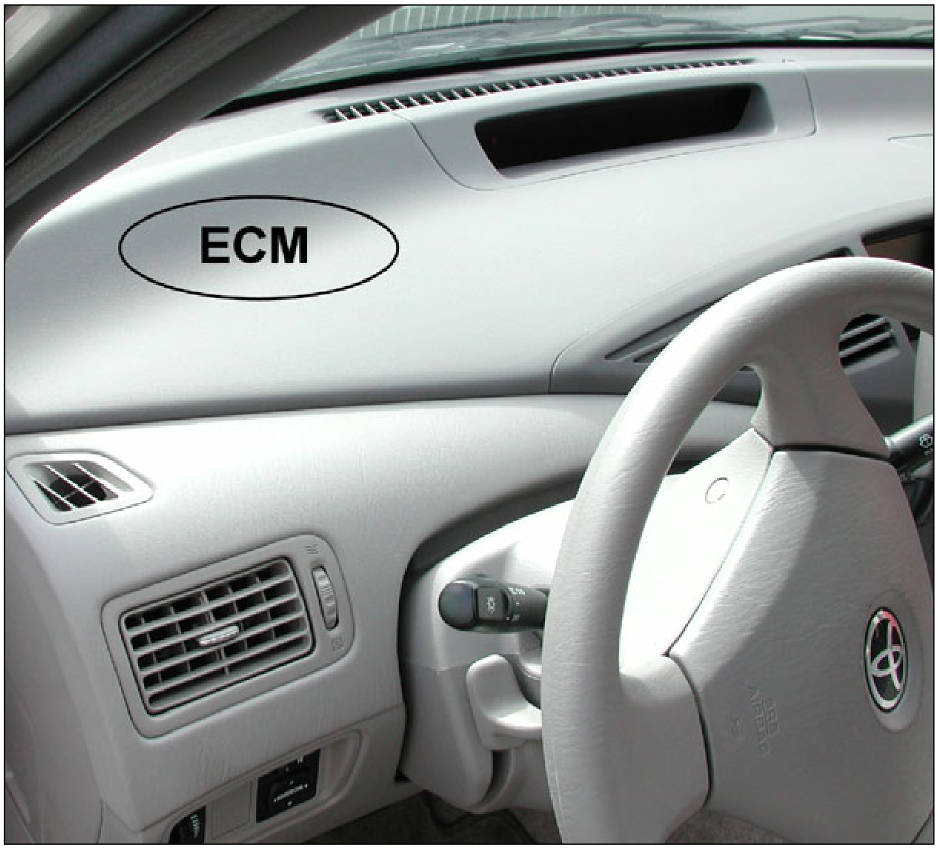
www.TheNationalLocksmith.com
Chat, Forums, Editorial,
Online Store, Tech Support

www.Laserkey.com
Product & Technology Sales,
Transponder Information Resources

CAUTION 警告 ATTENTION
HIGH VOLTAGE INSIDE 内部高電圧
HAUTE TENSION À L'INTÉRIEUR
·DO NOT remove these covers and/or connectors.
·このカバーおよびコネクタは絶対に取り外さないでください。
·NE PAS enlever ces couvercles et connecteurs.

2. Unlike a pure-electric car, the Prius is powered by both a small gasoline engine and an electric motor/generator and large battery bank. When the car is idling, all power that is needed is taken from the batteries. When the batteries run low, or during acceleration, the small, 1.0Liter, inline 4cylinder engine kicks in, either to recharge the batteries or to supply needed acceleration power. One or more of the Prius' 16 on-board computers controls all this. A color display on the dashboard displays the status of the Hybrid system as well as controls the car's stereo system.

3. There are many orange warning stickers and plugs under the hood, warning of electrocution hazard. I would think twice about giving or receiving a "jump-start" from a Prius.



4. The Prius uses a transponder key system. The car uses a TR-47PHT as the primary key. According to the owner's manual, the Prius can only hold 2 master keys and 1 valet. We have heard of a person that has successfully added 4 masters and 2 valets. If all master keys are lost, the cars Electronic Control Module (ECM) must be replaced or reset. This is quite a big job, considering the ECM that controls the transponder key system is located behind the dash, and dash removal is needed to gain access to this ECM.

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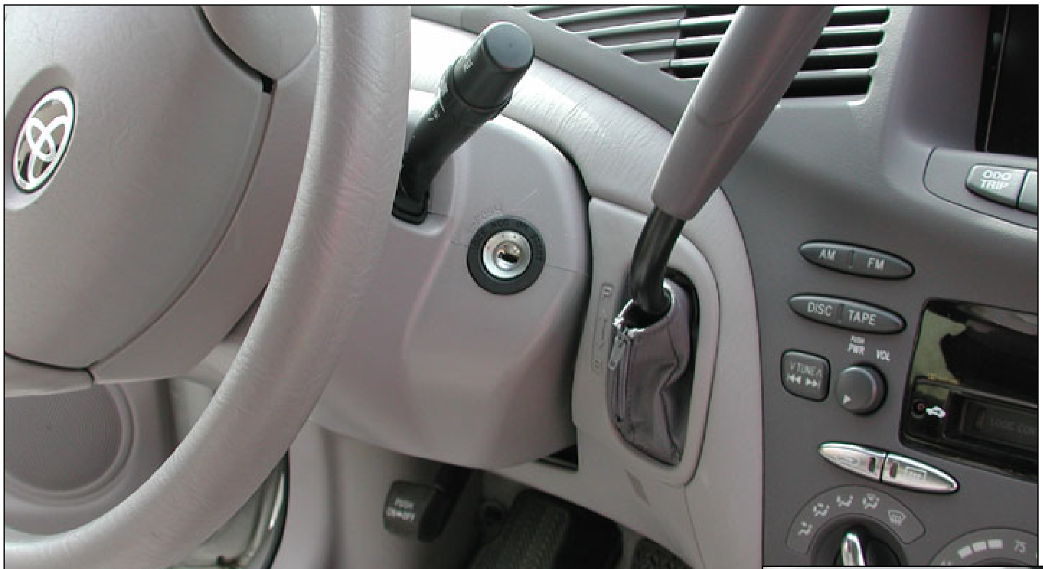
Issue No. 44

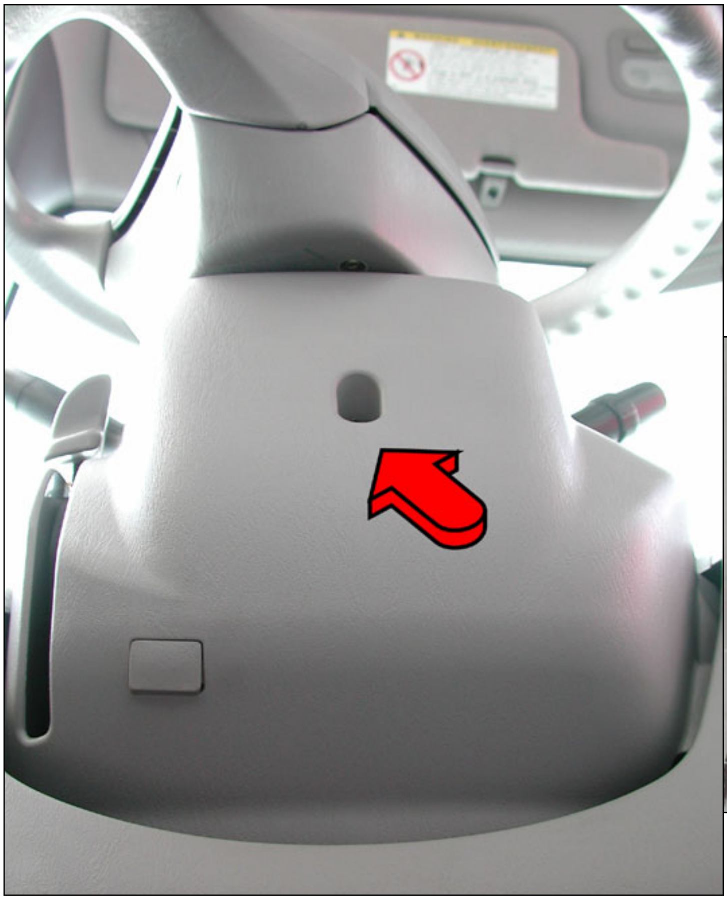
Opening:

This vehicle uses bicycle style cables instead of linkage rods inside the door. An under-the-window tool to attack the inside lock button is best. The alarm lock will attempt to relock the vehicle as soon as you unlock it, so be prepared to quickly open the door as soon as you unlock it.

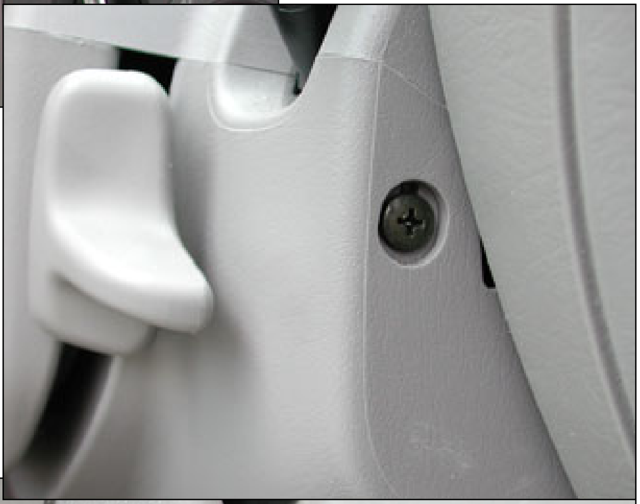
Ignition Lock:

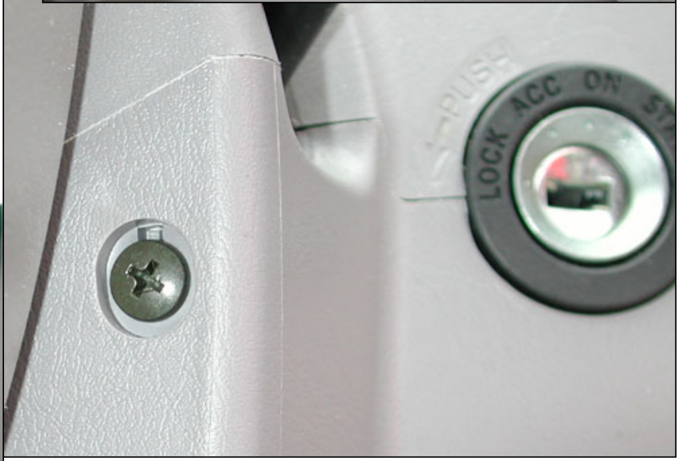


5. The ignition lock cylinder is held in place by an active retainer system. A working mechanical key is needed to turn the lock to "Accessory," as well as gain access to two of the shroud screws, so that the cylinder can be removed.



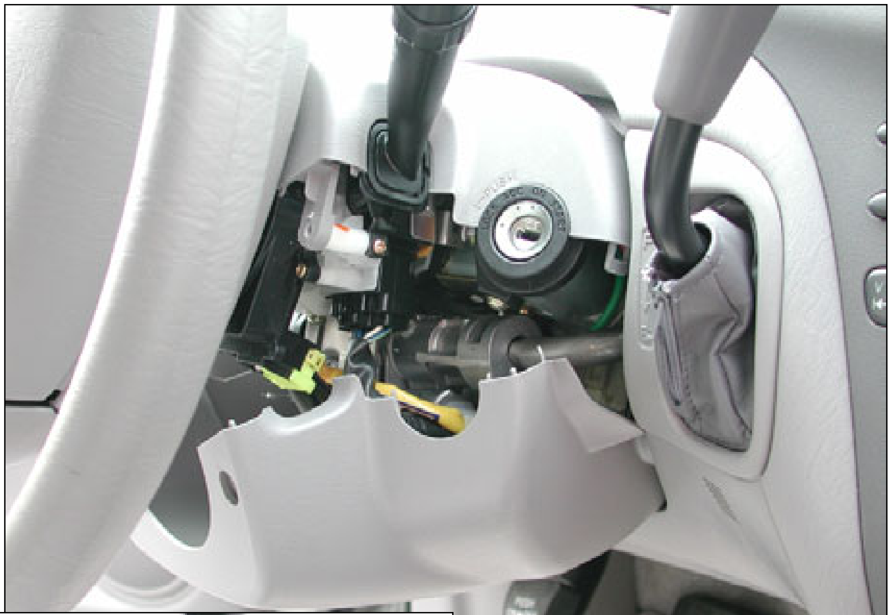
6. Begin by removing the single Phillips screw at the bottom of the shroud.

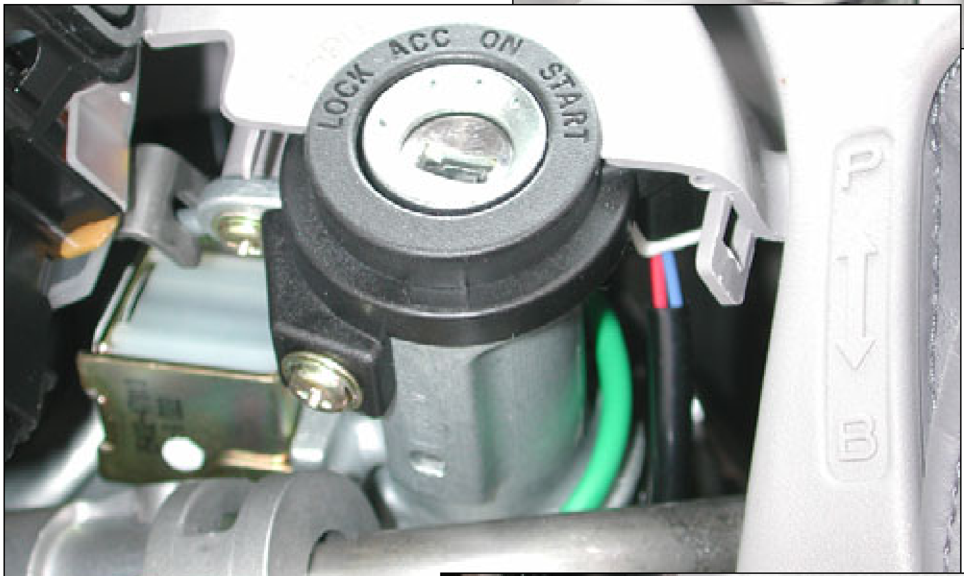




7. Next you will need to remove the two screws behind the steering wheel, located at the 3o'clock and 9 o'clock position. You will need a working key at this point. If the steering wheel is locked you will not have access to these two Phillips screws.

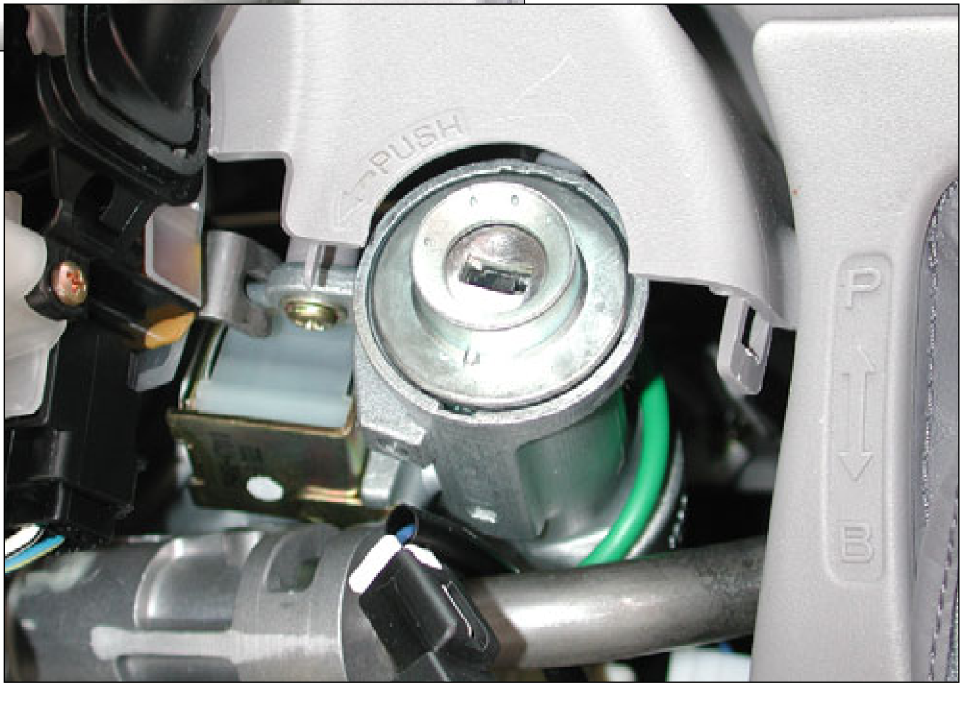
8. Now carefully separate the clamshell shroud.

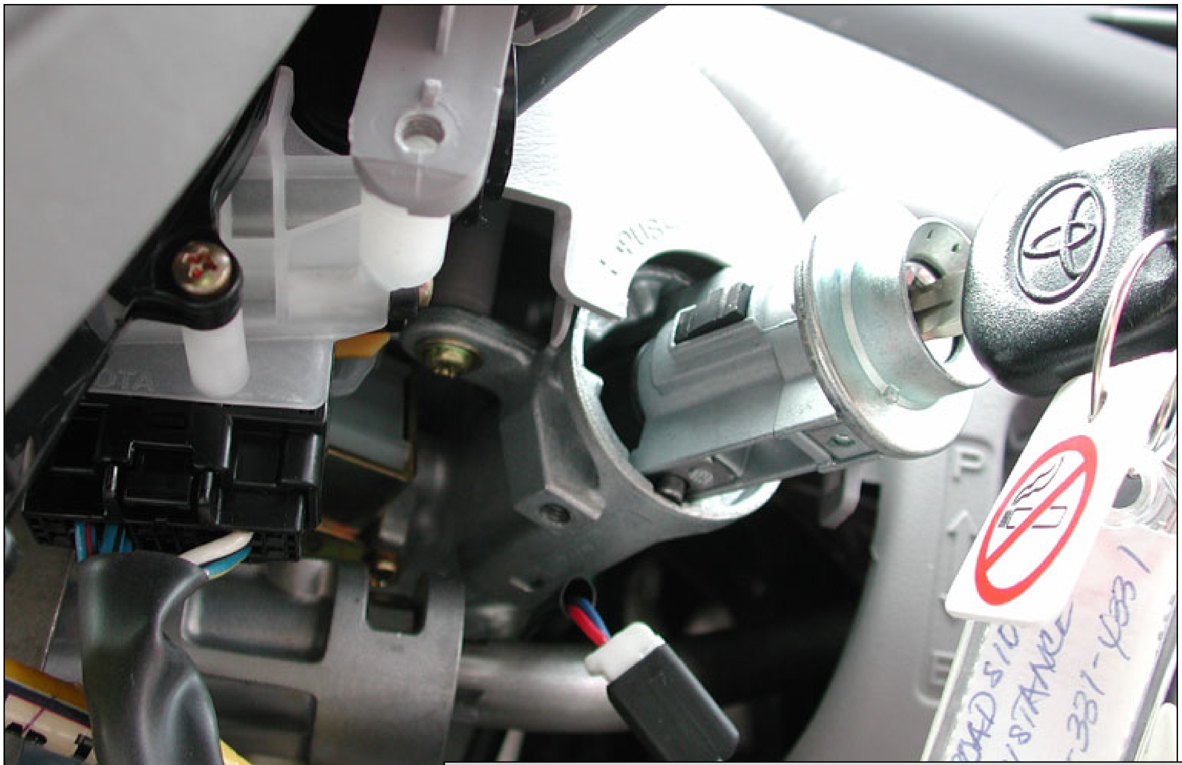




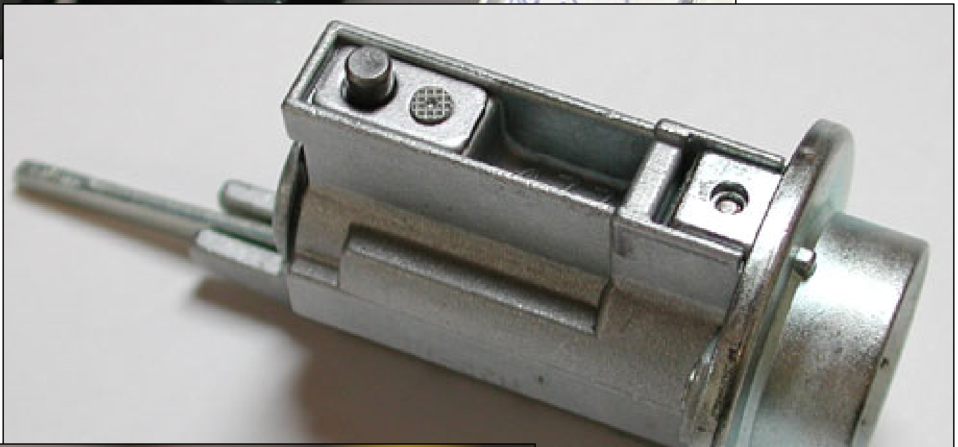
9. Remove the Phillips screw that holds the transponder antenna ring to the ignition cylinder.

10. Slide the antenna ring over the front of the lock.

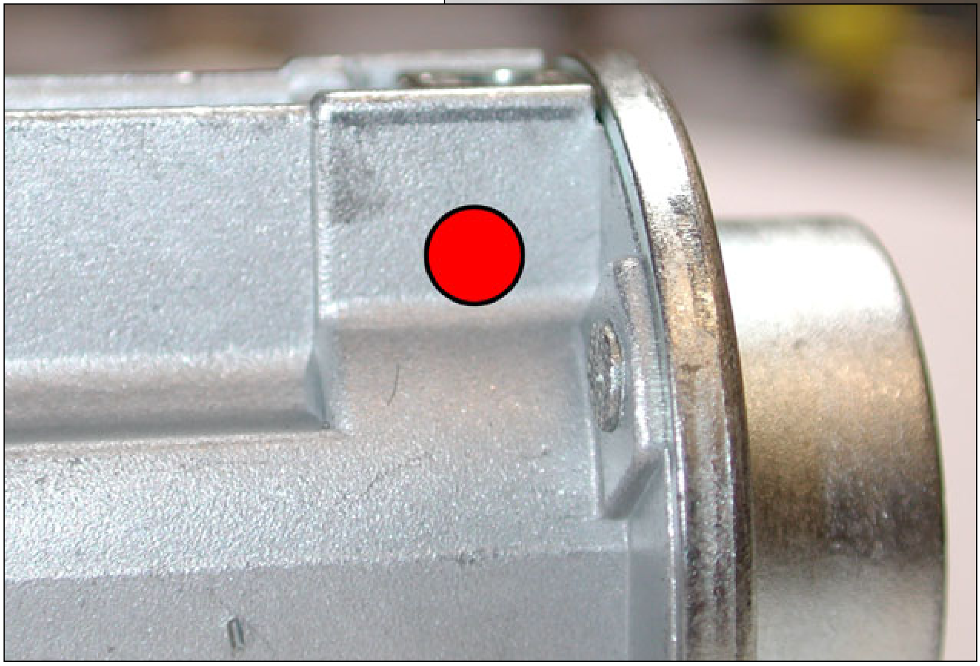




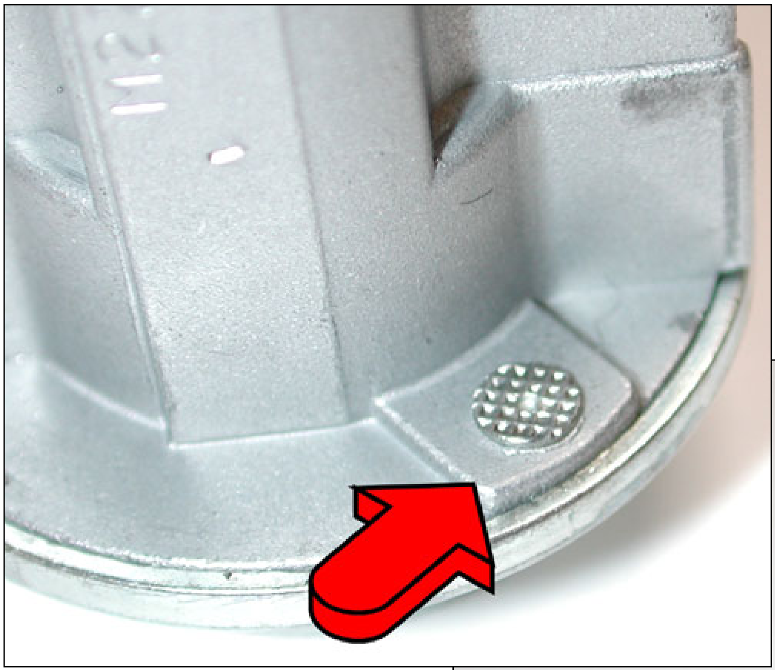
11. Turn the lock to the "Accessory" position and depress the active retainer. The cylinder can now be removed.



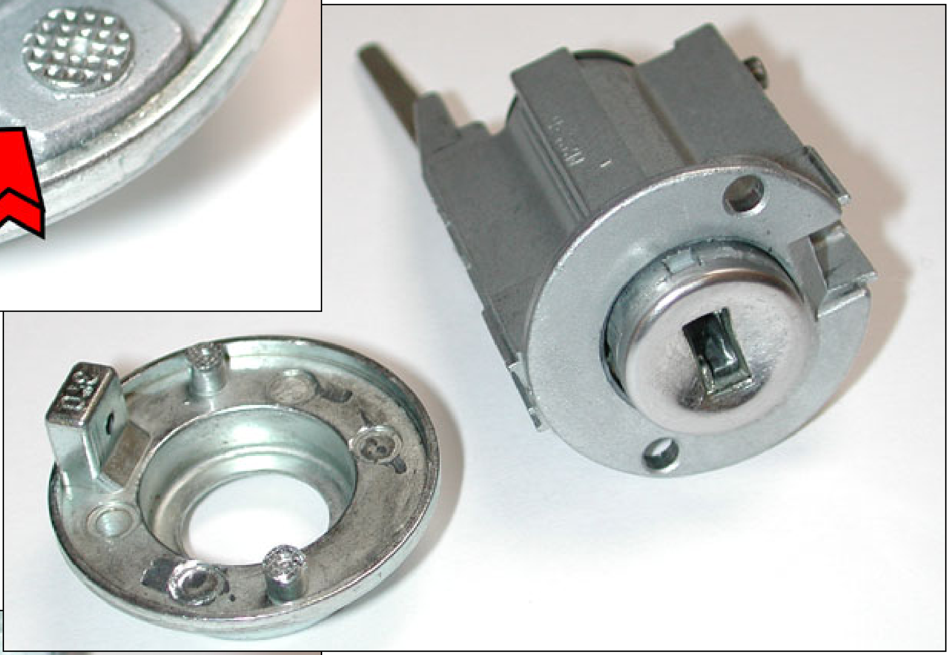
12. The Prius ignition lock is similar to that found on many 1990's Toyotas. The face cap is held in place by one steel roll pin and two tabs.



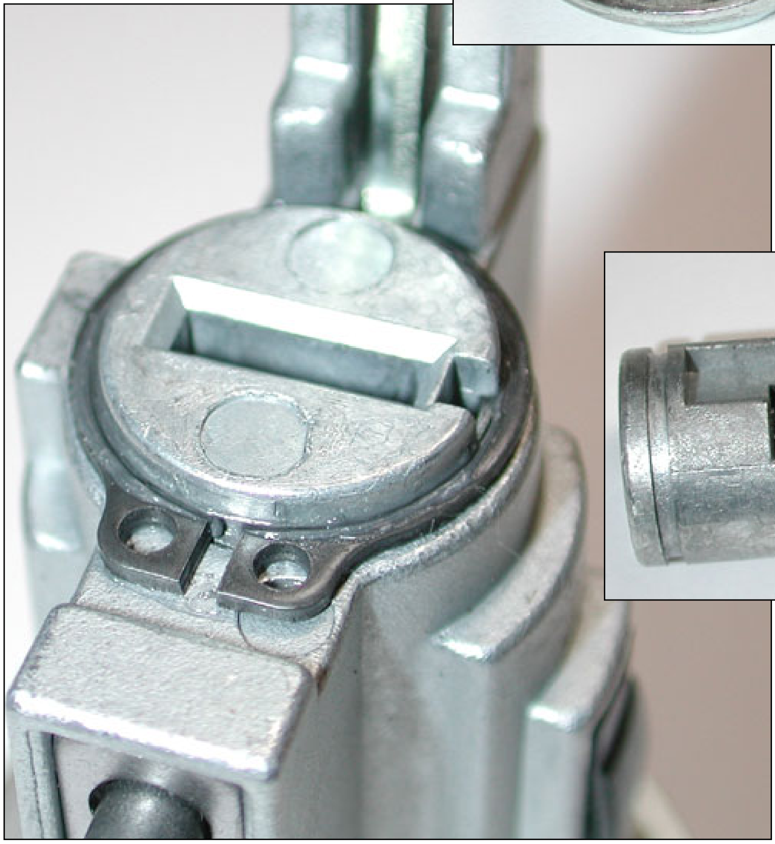
13. Start by drilling a small hole in the side of the cylinder housing, directly under the steel roll pin. Now insert a small pick into the hole and push the roll-pin outward. Once you get it out a little ways, you can grab it with a pair of pliers.



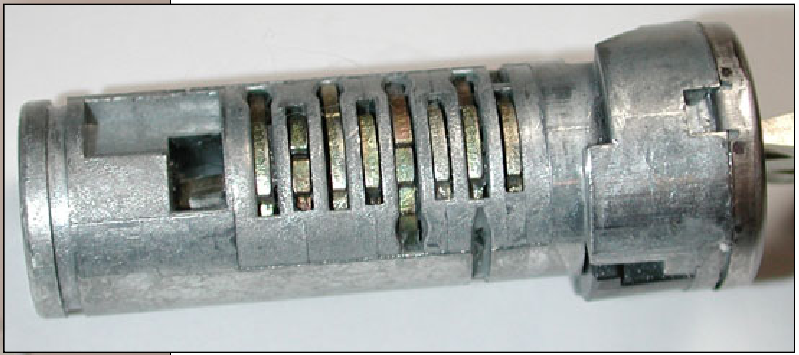
14. Next hold the lock securely in a vise and use a punch to punch the face-cap tabs trough the lock cylinder body.



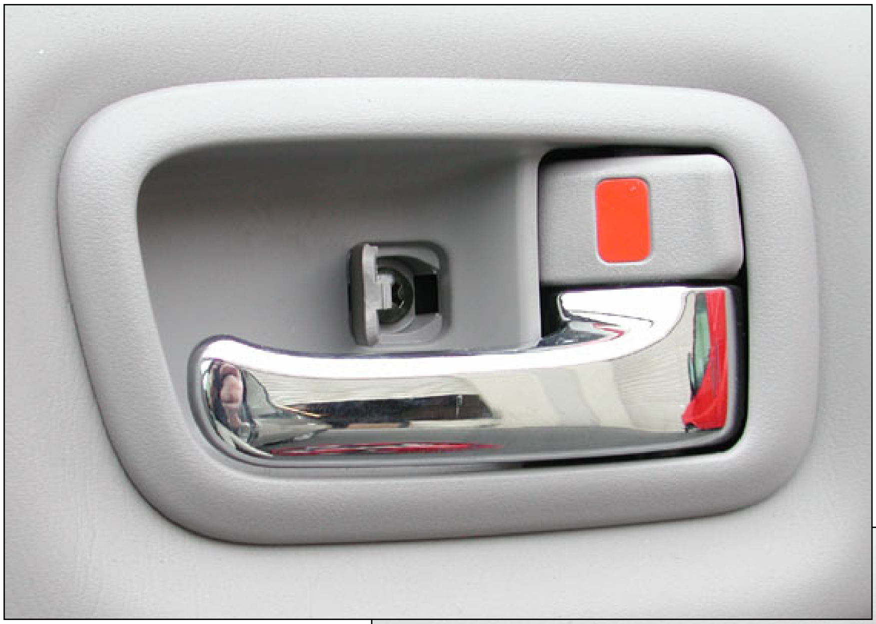
15. The face-cap can now be removed.



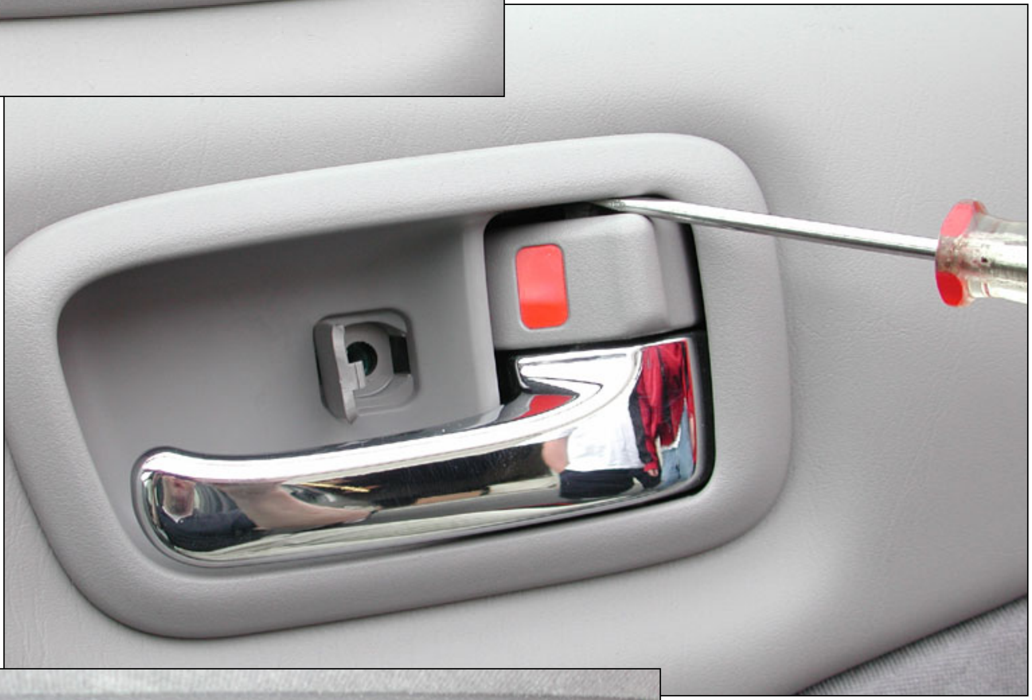
16. Next, remove the steel retaining ring at the rear of the cylinder with a pair of snap-ring pliers.



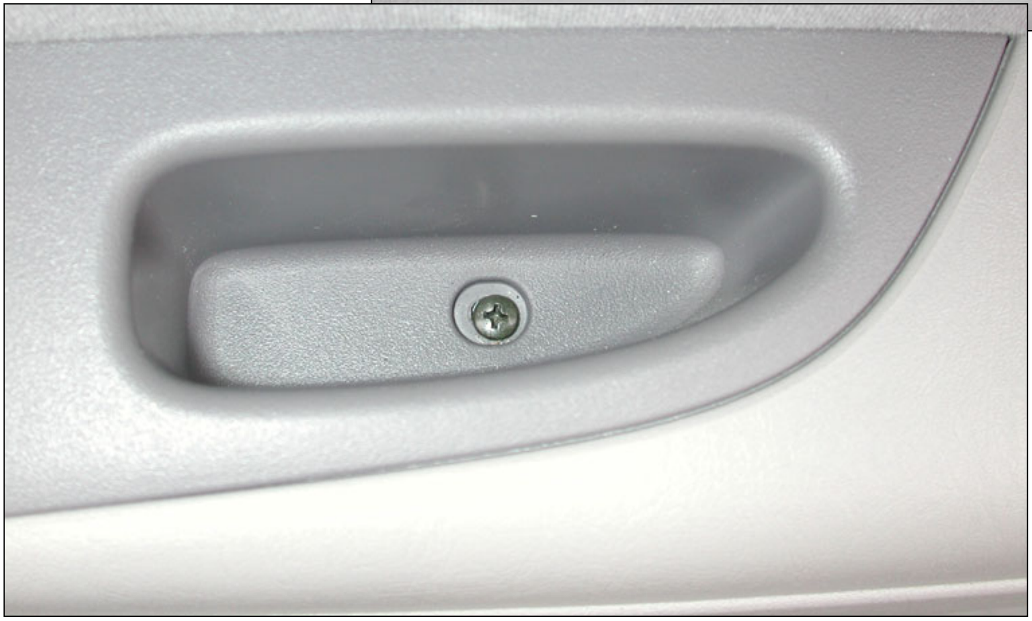
17. The cylinder can now be removed through the front of the lock. Note all 8 tumblers are present in the ignition.



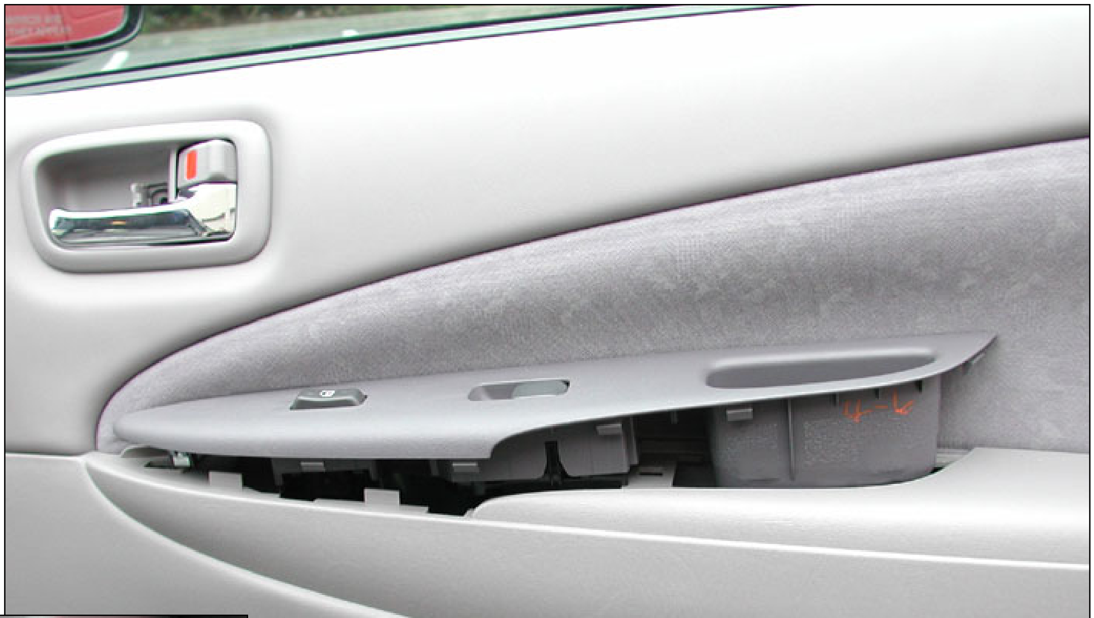
18. Begin by removing the Phillips screw that holds on the plastic trim panel around the inside door lock/unlock handle.



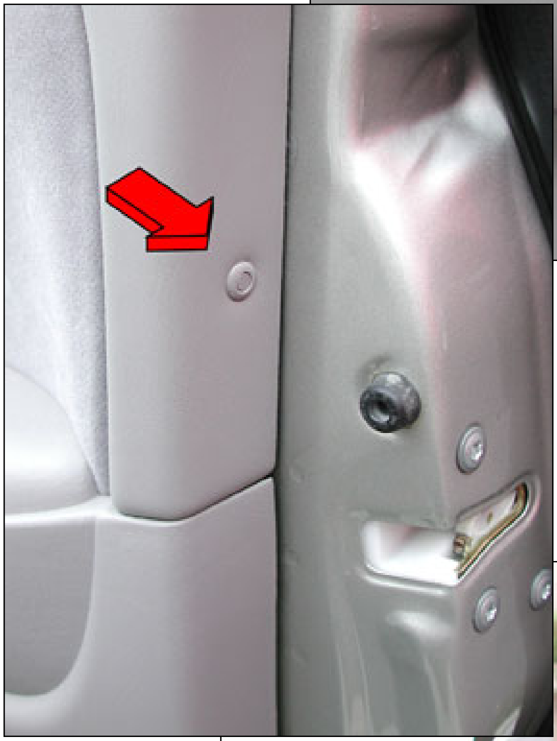
19. Remove the trim piece.



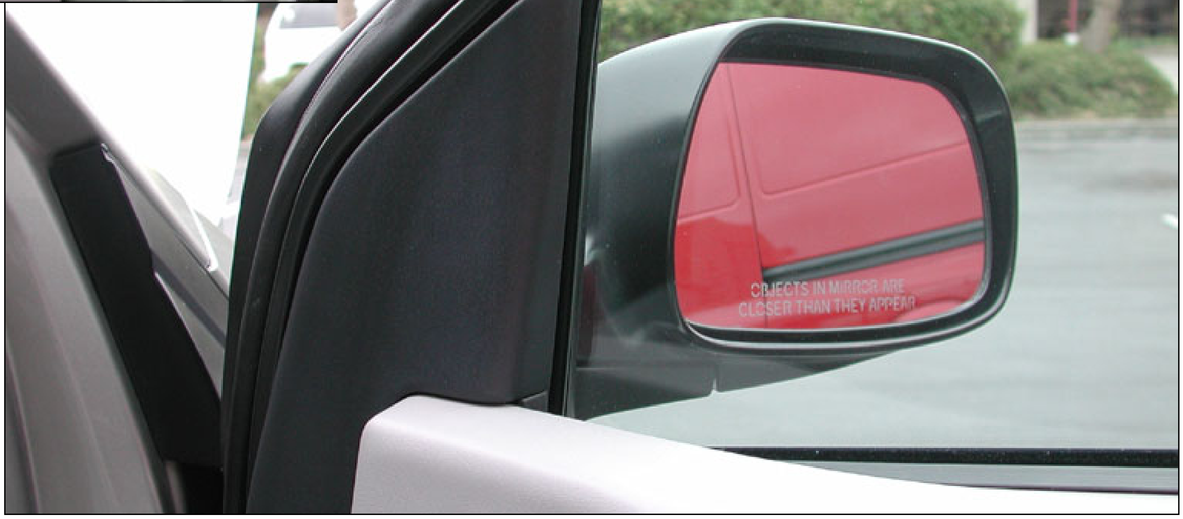
20. Next, remove the Phillips screw located at the bottom of the handhold, close to the elbow-rest.



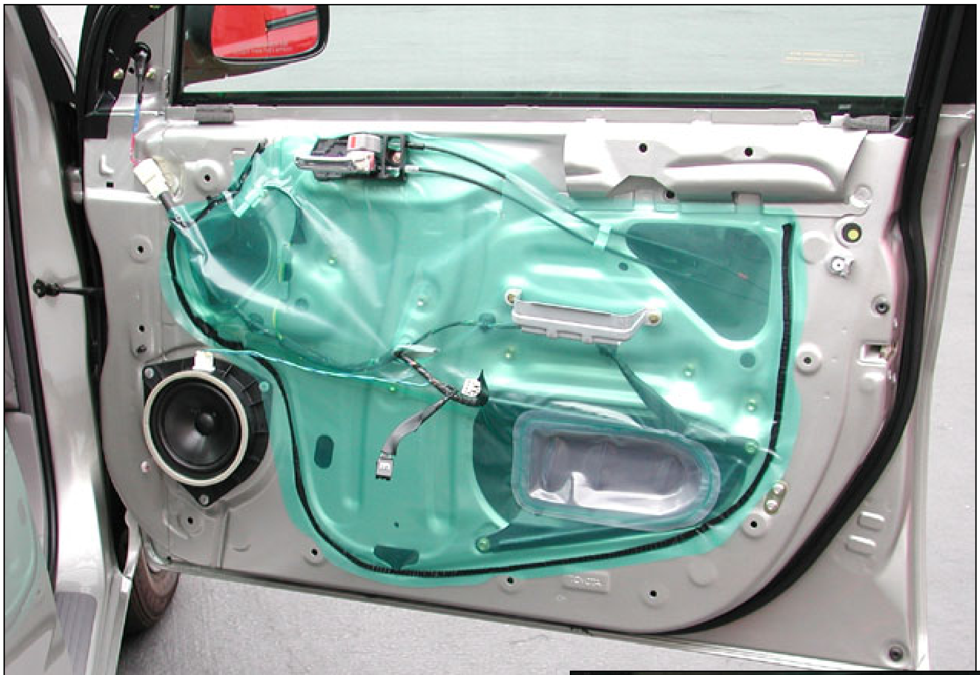
21. Now carefully lift up on the entire power door lock/unlock button and window control assembly and disconnect the two plugs.



22. Located on the corner of the door panel, approximately 3" above the door latch, you will find a "button type" retainer. Push the center of the retainer inward, and then pry the entire retainer out.

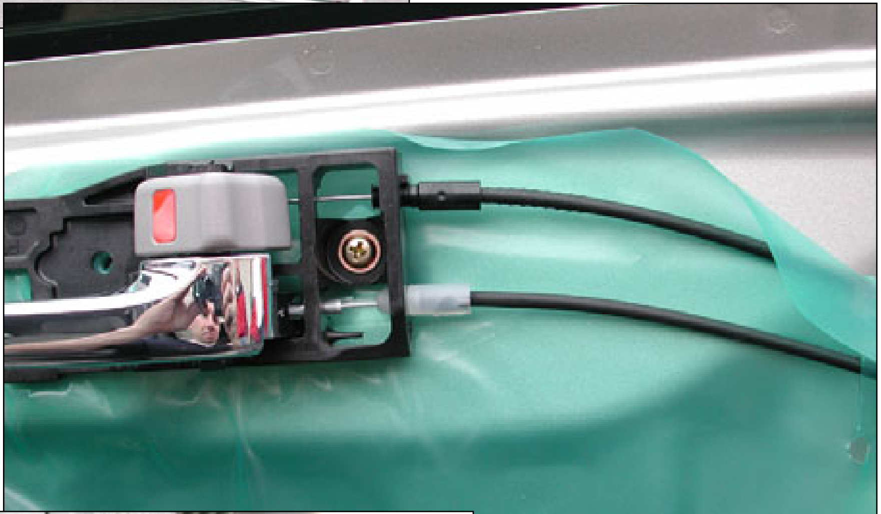


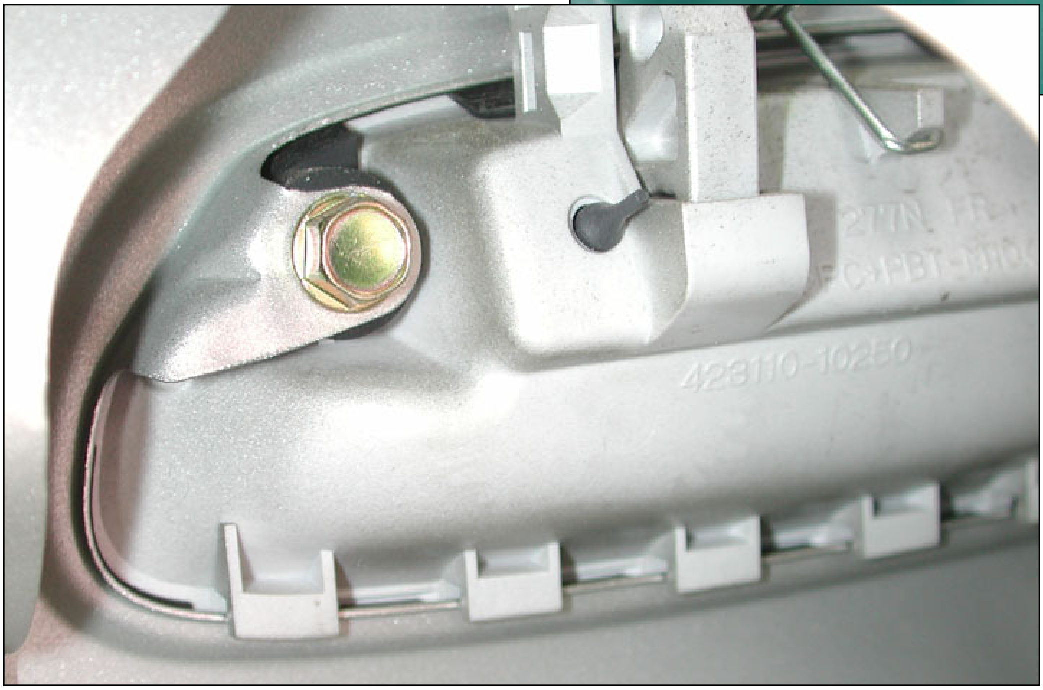
23. There is one more piece that will need to be removed before the door panel can come off. This black trim piece is located towards the front of the door, and is used to cover the bolts that hold on the passenger side mirror. It is easily pried off.



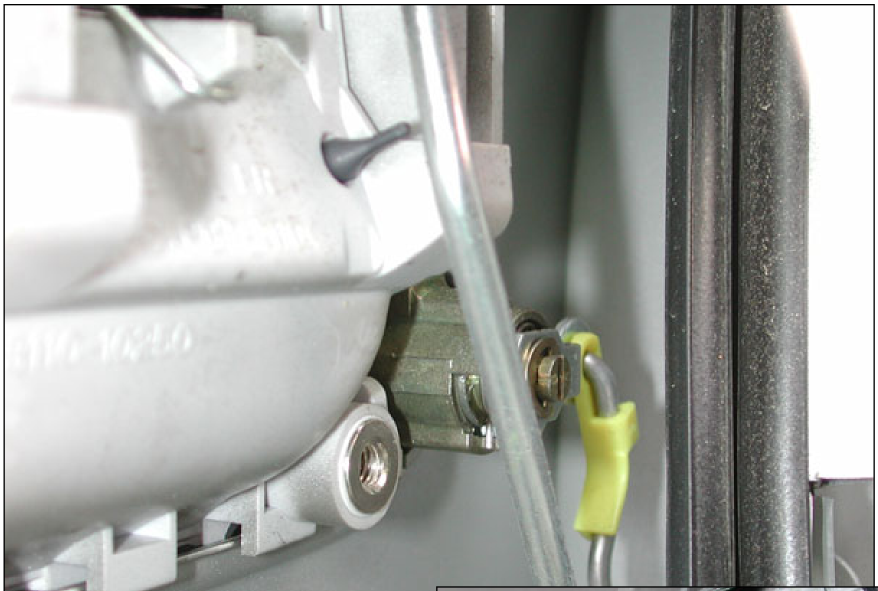
24. Now the door panel can be removed.

25. You can see the bicycle-style linkage cables that are commonplace on today's vehicles. For this reason, I would use an air-wedge and inside-access rod to open this vehicle.

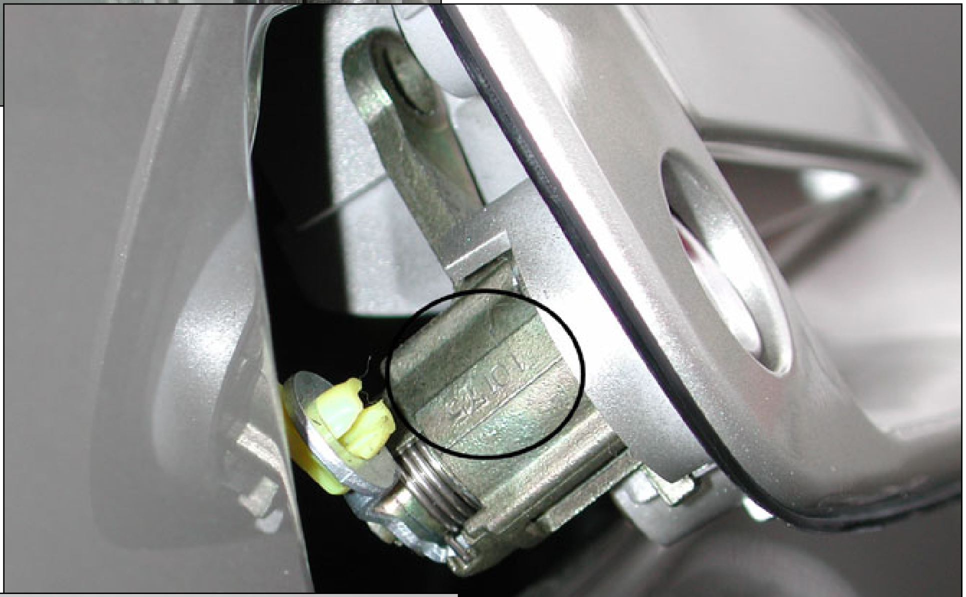




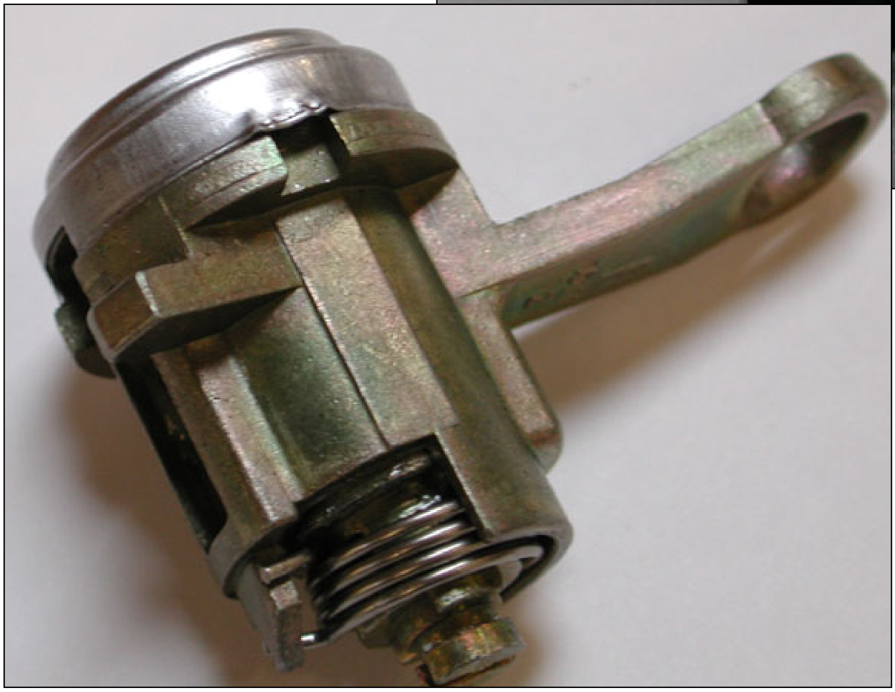
26. You can see the two 10mm bolts that hold the handle and lock in place.



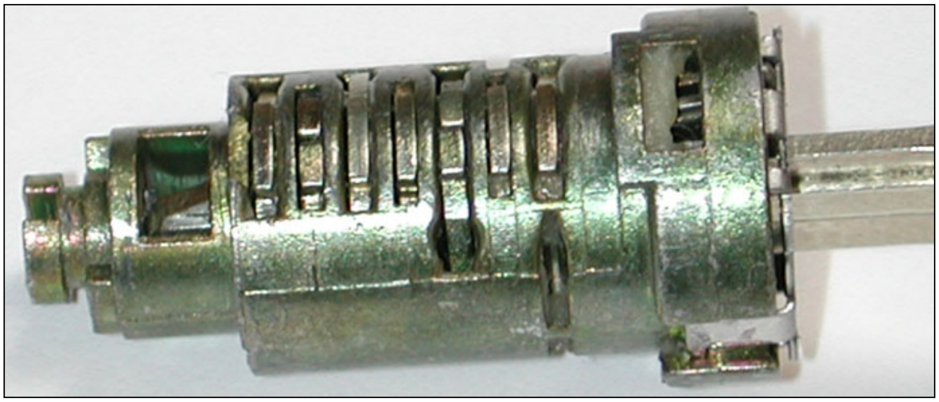
27. After the bolts have been removed, disconnect the latch-to-lock linkage and the outside handle-to-lock linkage.



28. The handle can now be tilted out the front. The lock has a code on it and can be seen when you tilt out the handle.



29. By prying off the face-cap and removing the tailpiece the cylinder comes out the front of the lock. The face-cap can be re-used.

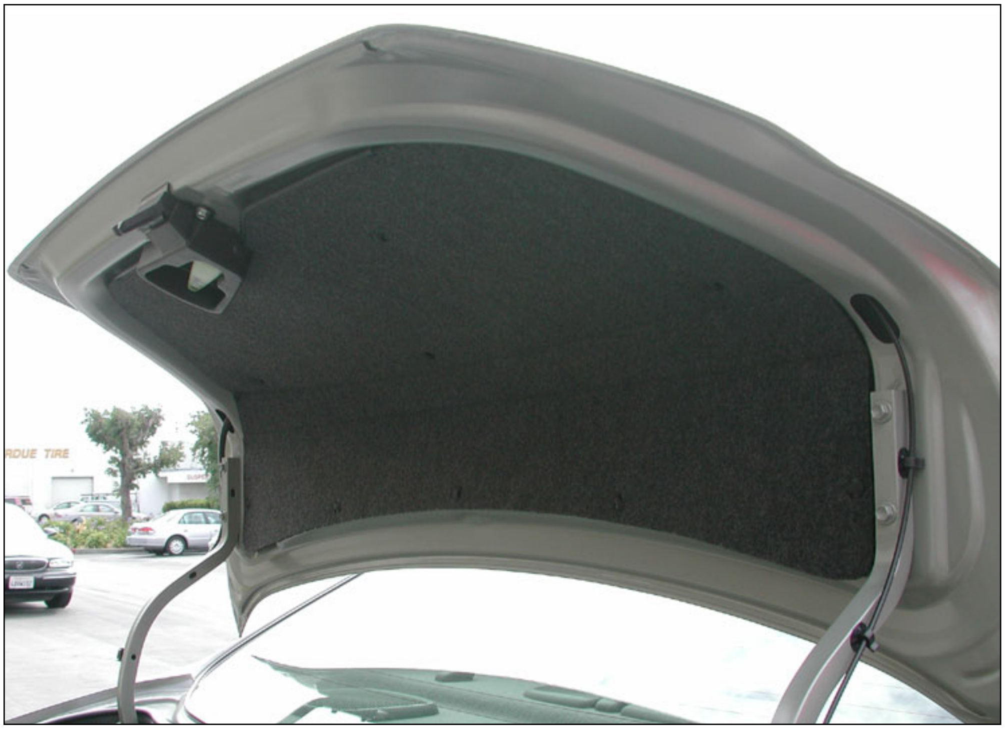


30. The last 7 (Bow to Tip) tumbler positions are found in the door lock cylinder.

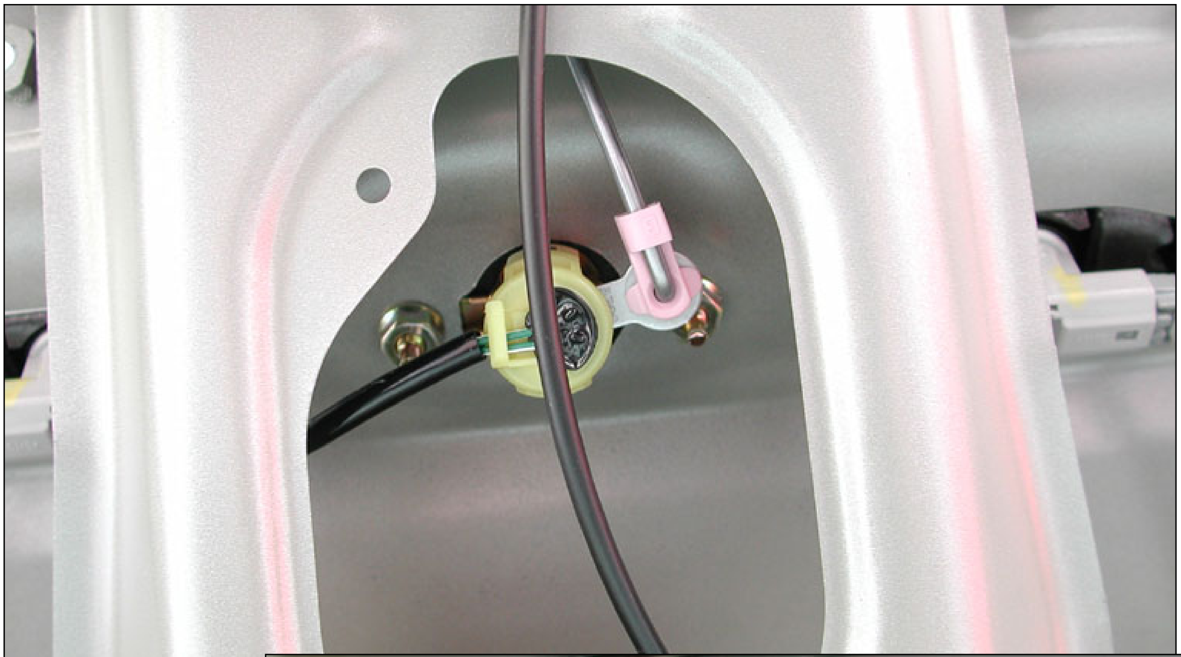
Glove Box Lock:

31. There is no glove-box lock on this model.

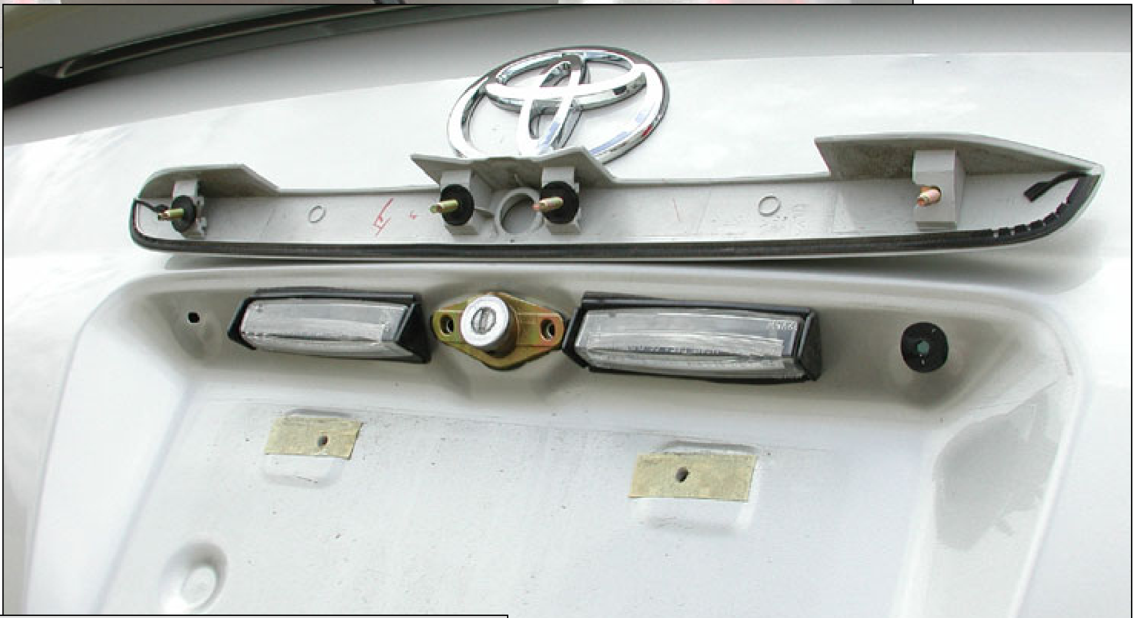
Trunk Lock Removal:



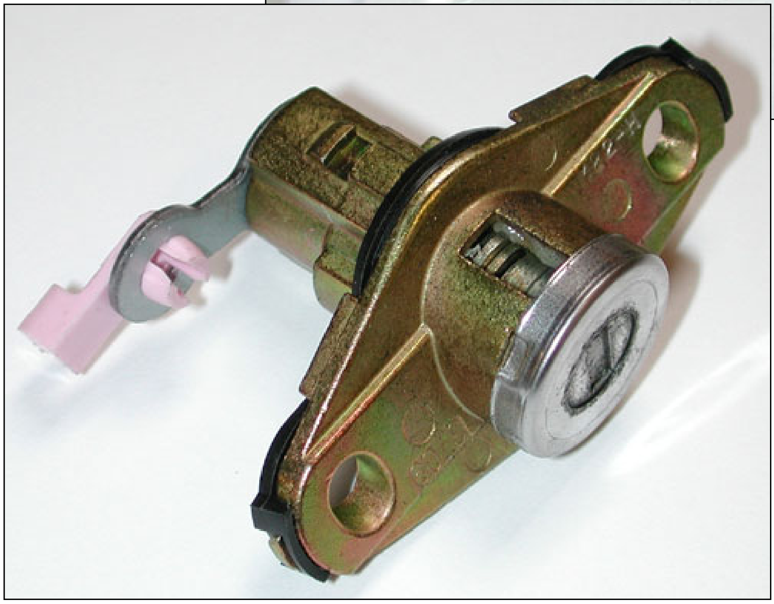
32. The trunk lock is removed from the outside of the car, but you must have access to the inside of the trunk to remove the trim piece that holds the lock to the car. Start by removing the black felt cover on the trunk lid.



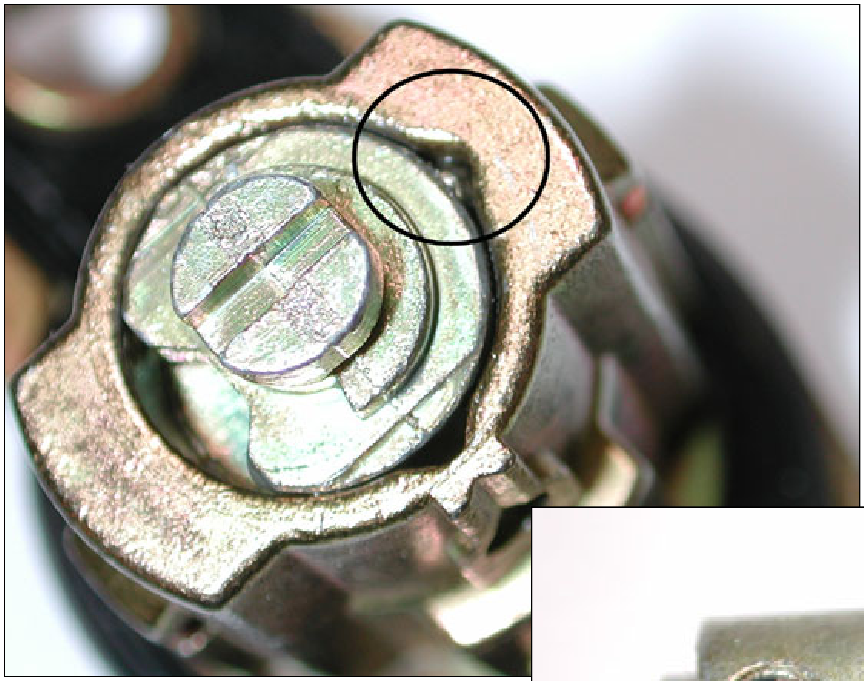
33. Disconnect the trunk lock linkage.



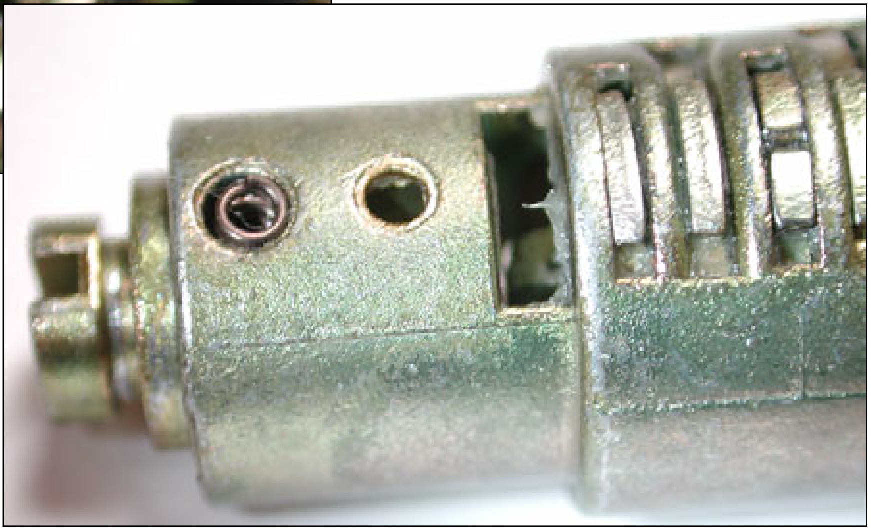
34. There are four, 10mm nuts that hold the long trim piece to the trunk lid. Remove them and you can remove the trim piece.

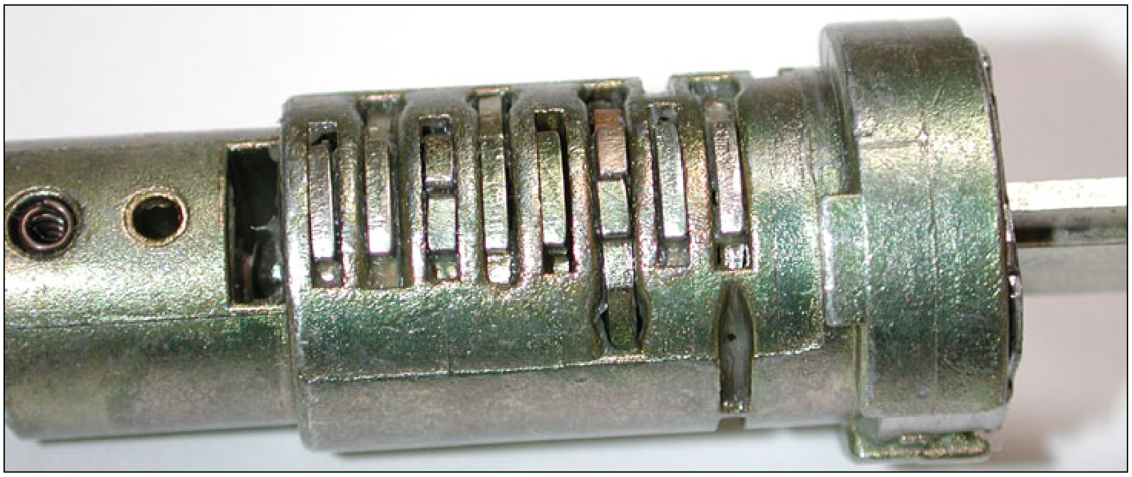


35. The trunk lock can now be removed.



36. Begin by gently prying off the face-cap and removing the tailpiece. The face cap can be reused. There is a small ball bearing and spring at the rear of the cylinder. BE CAREFUL when removing the cylinder through the front of the lock. The ball bearing will shoot out if you remove the cylinder too quickly. You may lose an eye, or worse, the customer's invaluable ball bearing.





37. The last 7 tumbler positions are found in the trunk lock.

Adding Master Transponder Keys:

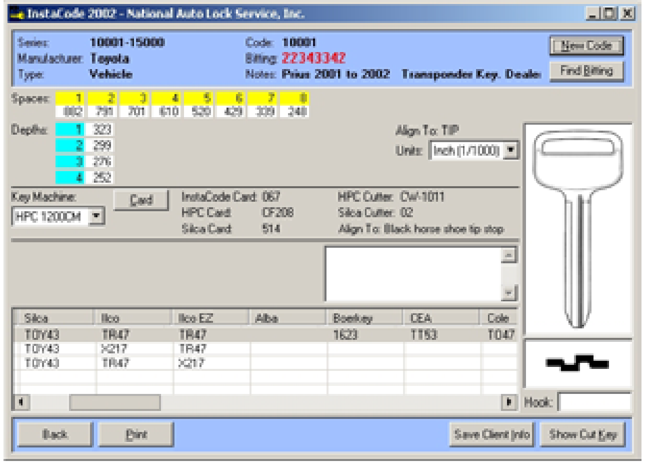
One Master key must be present.
1. Start out by sitting in the driver seat with all the doors shut.
2. Insert your working Master (black) key in the ignition lock.
3. Turn the key from "LOCK" to "ON" 5 times. End with the key in the "LOCK" position. This must be done very fast.
4. Open and close the driver's door 6 times. End with the door closed. This must be done very fast.
5. Remove your working Master key and insert your new un-programmed master key. This must be done very fast.
6. Turn the key to the "ON" position and leave it there for about a minute when the security light stops blinking.
7. To finish programming, take the key out, open and close the driver's door to finish the programming, and you're done.

Adding a Valet Key:

One Master key must be present.
1. Start out by sitting in the driver seat with all the doors shut.
2. Insert your working Master (black) key in the ignition lock.
3. Turn the key from “LOCK” to “ON” 4 times. End with the key in the “LOCK” position. This must be done very fast.
4. Open and close the driver’s door 5 times. End with the door closed. This must be done very fast.
5. Remove your working Master key and insert your new un-programmed Valet key. This must be done very fast.
6. Turn the key to the “ON” position and leave it there for about a minute when the security light stops blinking.
7. To finish programming, take the key out, open and close the driver’s door to finish the programming, and you’re done.

Erasing a Transponder Key:

One Master key must be present.
1. Start out by sitting in the driver seat with all the doors shut.
2. Insert your working Master (black) key in the ignition lock.
3. Turn the key from “LOCK” to “ON” 6 times. End with the key in the “LOCK” position. This must be done very fast.
4. Open and close the driver’s door 7 times. End with the door closed. This must be done very fast.
5. Wait for about 10 seconds and remove the key. Open and close the driver’s door once. All keys should be erased.



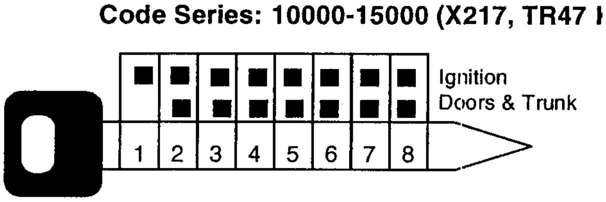
Series: 10001-15000
Manufacturer: Toyota
Type: Vehicle
Code: 10001
Bitting: 22343342
Notes: Prius 2001 to 2002 Transponder Key. Deale

Spaces:	1	2	3	4	5	6	7	8
	882	791	701	610	520	429	339	248

Depths:	
1	323
2	299
3	276
4	252

Align To: TIP
Units: Inch (1/1000)
Key Machine: HPC 1200CM
InstaCode Card: 067
HPC Card: CF208
Silca Card: 514
HPC Cutter: CW-1011
Silca Cutter: 02
Align To: Black horse shoe tip stop

Silca	Ilco	Ilco EZ	Alba	Borkey	CEA	Cole
TOY43	TR47	TR47		1623	T153	T047
TOY43	X217	TR47				
TOY43	TR47	X217				



A **CODE SERIES: 10000-15000**

Bow	SPACING FROM TIP						Tip
1	2	3	4	5	6	7	8
.885	.795	.705	.615	.525	.435	.345	.255

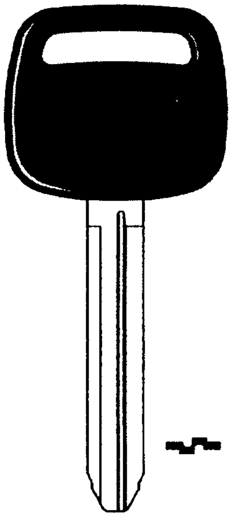
Bow	FRAMON SPACING						Tip
1	2	3	4	5	6	7	8
.017	.107	.197	.287	.377	.467	.557	.647

Cut to Cut: .090

DEPTHS	
1	.323
2	.299
3	.276
4	.252

Key Blanks:	ILCO: X217, TR47		SILCA: TOY43	
Reed Codes:	11-02-064		**HPC 1200 CM**	XF208
Curtis Clipper:	Cam DC-60	Carriage TOY-60	**ITL MFG:**	513
Pak-A-Punch	PAK-T1		**M.A.C.S.:**	2

NOTES: FRAMON—Use Ford 5 pin spacing clip. Set starting cut at .017.



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